

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 06-242632

(43)Date of publication of application : 02.09.1994

(51)Int.Cl.

G03G 9/087

G03G 9/097

(21)Application number : 05-050040

(71)Applicant : RICOH CO LTD

(22)Date of filing : 16.02.1993

(72)Inventor : MUTO KENKICHI

(54) PRODUCTION OF ELECTROSTATIC CHARGE IMAGE DEVELOPING TONER

(57)Abstract:

PURPOSE: To provide a toner which has uniform electrostatic chargeability and with which bright image is obtainable and excellent durability and fixing characteristics are obtd. by fixing composite particulates formed by bringing resin particulates having an acidic group and fluorine-contained quaternary ammonium salt into reaction to the surfaces of coloring resin particles.

CONSTITUTION: The composite particles of the fluorine-contained quaternary ammonium salt obtd. by bringing the resin particulates having the acidic group and the fluorine-contained quaternary ammonium salt into reaction in the presence of a nonionic surfactant and the coloring resin particulates are mixed and the composite particles are injected to the surfaces of the coloring resin particles by mechanical energy to form a film. Namely, a stable suspended state in hydrogen is maintained in the resin particulates by the charges generated by the acidic group but the charges are lost by reaction with the fluorine-contained quaternary ammonium salt and the particles are made hydrophobic by the fluorine group contained therein. The resin particles, therefore maintain the stability even after the reaction with the fluorine-contained quaternary ammonium salt by the presence of the nonionic surfactant which does not participate in the reaction and, therefore, the composite particulates are uniformly stuck to the surfaces of the coloring resin particles.

LEGAL STATUS

[Date of request for examination]

24.12.1999

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

3258750 ←

[Date of registration]

07.12.2001

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]